

# STEM

## FACULTY TAS

## CHARGE \$20

Cost covers materials for practical learning

## HOURS 100

Board endorsed

This course explores the fields of technology and engineering including engineering fundamentals, aerodynamics, motion and mechatronics. Students will work on a major research project and participate in numerous practical learning activities such as the Electric Vehicle Bike Race, Robo Cup, Radio Control 4x4 Rock Crawler Competition and other science and engineering-based competitions.

Overall, it is a practical based subject where students learn to apply concepts directly to a personal project.

Practical experiences include competing in various engineering challenges, designing and racing electric bikes, launching bottle rockets, creating and coding robots and 3D printing prototypes of products.

### WHAT WILL WE MAKE?

You will complete various engineering challenges, design and race electric bikes, launch bottle rockets, create and code robots, fly motorised model airplanes and 3D print prototypes of products.

## STAGE 6 SUBJECT SELECTION

Engineering Studies  
Maths  
Sciences  
Certificate II Engineering

## HIGHER EDUCATION

Bachelor of Engineering and Computing  
Bachelor of Mathematics and Statistics  
Bachelor of Science

## CAREER OPPORTUNITIES

Engineering  
Design  
Aviation  
Computer Science  
Physics